

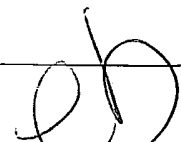


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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/786,045	02/28/2001	Werner Vogt	P/4319-17	6837
2352	7590	06/30/2004	EXAMINER	
OSTROLENK FABER GERB & SOFFEN 1180 AVENUE OF THE AMERICAS NEW YORK, NY 100368403			KOCH, GEORGE R	
			ART UNIT	PAPER NUMBER
			1734	
DATE MAILED: 06/30/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/786,045	VOGT, WERNER	
	Examiner	Art Unit	
	George R. Koch III	1734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-14, 17-20 and 22-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-14, 17-20, 22-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE-92,18,985 in view of Okada (US 5,468,315), Morse (US Patent 3,551,952) and Day (US Patent 4,659,304)

DE-92,18,985 discloses a method for producing a card shaped information carrier involving covering the surface of a card size region of blank material with a transparent layer (see Claim 1). The layer is pressed onto the surface of the card while being subjected to heat and pressure simultaneously (claim 6). For positioning and receiving the card to be laminated, DE-92,18,985 further discloses a hollow mold-like frame that can be placed on base plate for receiving cards or templates to be laminated and a top plate that can be set on the card in the frame (see claim 10, for example).

DE-92,18,985 does not disclose in a peripheral narrow outer boundary region of the inserted template with a peripheral frame consisting of material which is one of substantially non-heat conducting, reflects heat, and concentrates heat back onto an inserted laminate, the frame having internal dimensions that correspond to the final dimensions of the card shaped carrier; so that quantities of heat flowing off per se there are retained, blocked in, and concentrated back on the template.

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Okada discloses a similar apparatus and method of use which is capable of creating card shaped information carriers (Okada discloses mold dimensions of 100.1 mm by 100.1 mm, as in column 3, lines 61-67, which is taken to be "card-shaped"). Okada's apparatus comprises a frame defining a cavity (item 4, also called a restraining mold)), and that the frame has internal dimensions which correspond to the final dimensions. Okada further discloses heating plates (items 2 and 3) arranged on both sides of the frame forming by its internal dimensions the cavity for the lamination process. Morse discloses an apparatus for applying heat and pressure to laminates wherein a blocking structure (item 14 and 15), which covers the peripheral, narrow, outer boundary of the pressing structure and corresponds to the dimensions of the substrate. Morse discloses that the structure prevents the loss of heat during the pressing operation (see column 1, lines 16-18, see also column 2, lines 25-33, see also column 2, lines 46-54). Furthermore, Day also discloses in a peripheral narrow outer boundary region of the inserted template with a peripheral frame consisting of material which is one of substantially non-heat conducting, reflects heat, and concentrates heat back onto an inserted laminate, the frame having internal dimensions that correspond to the final dimensions of the mold or heat pressing structure, so that quantities of heat flowing off per se there are retained, blocked in, and concentrated back on the substrate (see abstract and columns 2-4). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized the blocking structure of Okada, Morse and Day in the overall method of DE-92,18,985 in order to reduce the heat loss of the method and apparatus, thus improving the overall efficiency and energy

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savings. Furthermore, it is noted that a heat shield structure that prevents heat from escaping outward would implicitly being substantially non-heat-conducting, and reflect/concentrate heat back to the interior, towards the substrate to which dimensions are disclosed as corresponding towards.

As to claim 13, DE-92,18,985 discloses that the laminate template includes a plurality of sized card layers (best seen in Figure 2, elements 6 and 5).

3. Claims 14 and 22 rejected under 35 U.S.C. 103(a) as being unpatentable over Okada in view of XP-002128554, Honda, Day and Morse.

Okada discloses an apparatus capable of creating card shaped information carriers (Okada discloses mold dimensions of 100.1 mm by 100.1 mm, as in column 3, lines 61-67, which is taken to be "card-shaped"). Okada's apparatus comprises a frame defining a cavity (item 4, also called a restraining mold)), and that the frame has internal dimensions which correspond to the final dimensions. Okada further discloses heating plates (items 2 and 3) arranged on both sides of the frame forming by its internal dimensions the cavity for the lamination process. The heating plates include an upper plate (item 2), and a lower plate (item 3). Both of the heating plates have external dimensions that correspond to the internal dimension of the frame and are insertable with a prestressing action into said frame so as to produce the pressure required for lamination (from items 5).

Okada does not disclose that the frame, or side structure, is designed to have peripheral regions which consist of a material which is slightly heat conducting, reflects

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heat and concentrates heat back onto an inserted laminated. Furthermore, Okada does not disclose that the frame has a reduction in material in a transitional edge region in order to increase specific contact pressure between the frame border edge and the upper heating plate.

Morse, Day and XP-002128554 discloses that it useful to include thermally insulated plates, i.e., a frame made of a slightly heat conducting material, position around the hot plates, and further including a heat reflective layer. This structure would reflect heat and concentrate heat back onto the laminate. Morse discloses that such a structure (items 14 and 15) would block in heat. Day discloses that these properties lead to energy savings (column 4). XP-002128554 also discloses that the heat radiation and heat dispersion are reduced due to this structure. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have made the frame of Okada out of a slightly heat conductive material as suggested by Morse, Day and XP-002128554 in order to reduce heat radiation and dispersion and improve lamination operation.

Honda discloses various side structures (such as element 5 in Figures 1, 2 and especially element 6 in Figures 3, 4) which disclose frame structures with reduction of material in a transitional edge region for contact with the lower press structure. Honda discloses that such a profile allows for sealing the gap between the pressing structures and improves the heat and pressure lamination operation (see, for example, columns 6 and 7). Honda does not disclose reversing the parts so the structure so that the transitional edge region with reduction of material contacts the upper platen. However,

such a reversal is obvious as it is a functional equivalent of the structure of Honda since it merely rearranges or reorients the structures of the first plate, the second plate, and the transitional edges as an obvious design choice with no unexpected results. (See *In re Kuhle*, 526 F.2d 553, 188 USPQ 7 (CCPA 1975). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have incorporated such a profile in the upper portion of the frame and upper heating press of Okada (as modified by XP-002128554, and Vogt) in order to improve contact between the frame and the heating plate and thus improve the heat lamination operation.

As to claim 22, Honda discloses the reduction in material being formed by a peripheral outer annular recess (see element 6 in Figures 3 and 4).

4. Claims 17- 20 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada, XP-002128554, Honda, Day and Morse as applied to claims 14, and 22 above, and further in view of Vogt (US patent 5,399,223).

As to claim 17, Okada discloses that the heating plates include an upper and lower heating plate (item 6 and surrounding structure), and that the lower plate has external dimensions corresponding to the frame (item 4).

Okada, XP-002128554, Honda and Morse does not disclose a cooling structure.

Vogt discloses a cooling body (item 21a) which is inserted into a frame (items 19a and 19b) which is used in a process for laminating identification cards. The addition of this cooling body with the Peltier effect is disclosed as enabling the cooling effect to be enhanced in a particularly efficient way (column 5, lines 1-7). Therefore, it

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would have been obvious to one of ordinary skill in the art at the time of the invention to have included a cooling body as suggested by Vogt in order increase the efficiency of the cooling and improve the operation speed.

As to claim 18, Okada discloses that both heating plates have dimensions that correspond to the internal dimensions of the frame.

Okada, XP-002128554, Honda, Day and Morse do not disclose that one of the heating plates is insertable into the frame by a means for prestressing acting on the cooling body adjacent to the lower heating plate.

Vogt discloses that the lower plate (Figure 1, item 17) is insertable into the frame (Figure 1, items 19a and 19b) by means of a prestressing action created by springs 24, which are acting upon both cooling body (item 21a) and lower plate (17). Vogt further discloses that these springs provide sufficient laminating pressure for the lamination operation (specifically recited in column 8, lines 18-31). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have included structure for inserting the lower heating plate in order to provide sufficient laminating pressure and improve lamination efficiency.

As to claim 19, Okada clearly discloses a lid structure in Figures 1 and 3. The portion of plate 2 which is disposed above frame 4 functions as a lid structure.

As to claim 20, Okada discloses pressure producing means for pressing the frame and upper heating plate firmly together (see element 5 in Figure 3).

As to claim 23, Okada discloses frame prestressing means for pressing the frame against the boundary lip of the upper heating plate (see element 5 in Figure 3).

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As modified by Honda, such a structure would press the transitional edge against the upper heating press.

As to claim 24, Okada discloses that these prestressing means are supported on the heater block.

Okada, XP-002128554, Honda, Day and Morse do not disclose supporting the frame via any structure on top of the cooling block.

Vogt discloses supporting the frame by means of prestressing structures such as screws (item 20, see column 9, lines 39-46) which are disposed on the cooling block. One in the art would appreciate that disposing the frame on the cooling block rather than directly attaching it to the heating structures would prevent overheating of the springs of Okada, thus improving the apparatus life. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have incorporated attachment of the frame to the cooling block in order to prevent overheating of the less durable springs which form the stressing means.

Response to Arguments

5. Applicant's arguments filed 4/9/2004 have been fully considered but they are not persuasive.

6. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208

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USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

7. With respect to DE-9218985 and Okada not disclosing the non-heating, heat reflecting, and heat concentrating properties, the Morse and Day references teach and suggest these properties.

8. With respect to Morse and Day having differences with regard to the dimensions, these references are not relied upon for the dimensions.

9. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning (as recited in pages 3-4 of the remarks filed 4/9/2004), it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George R. Koch III whose telephone number is (571) 272-1230 (TDD only). If the applicant cannot make a direct TDD-to-TDD call, the applicant can communicate by calling the Federal Relay Service at 1-800-877-8339 and giving the operator the above TDD number. The examiner can normally be reached on M-Th 10-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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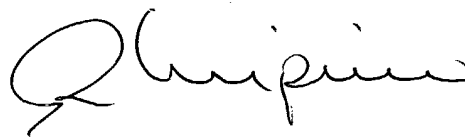
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GRK

June 27th, 2004

George R. Koch III
Patent Examiner
Art Unit 1734



RICHARD CRISPINO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700